

# Shutdown work done

Machine	Description	i/c	Comments
PreAcc	Realigned RFQ and MEBT	Kiyomi/ Bollinger	Untilted RFQ, MEBT quads and set components to Linac reference line.
Linac	Tank 4 drift tube replacement	Kiyomi/Linac group/Mechanical	Completed. 24 Jul.
Linac	Klystron 2 choke replacement	Kiyomi/Linac group/Mechanical	Completed. 30 Jul
Linac	Repair ceramic in Tank 7 SCL module	Kiyomi/Mike	Completed
Linac	Toroid calibrations	Aiyshah	Completed.
400 MeV line	Fixed vacuum leak in feedthru connector of wire scanner	Salah/ Mechanical	Completed.
Booster	2 <sup>nd</sup> harmonic	Tan/Robyn/ John	Cracks will be repaired.
Booster	Repair of cavity #1017 water leak (station 22).	RF group	Installed
Booster	Wide bore cavity	RF group	Waiting ...
Booster	Various water leaks	Booster group/ Mechanical	Completed.
Booster	Wire scanner in injection girder pulled in L1	Salah/John/ Mechanical	Completed.
Booster	Survey at L11 for PIP-II injection line	O'Sheg/ Surveyors	Completed

# Startup blues

- Sparking in source A
  - Too much Cs?
- RFQ power drops
  - Bad RF connection between Tomco driver and tube?
- Sparking in MEBT buncher.
  - Beam seems to cause sparking when steered to the left (seen before 7 years ago)

# Task force updates

- Injection girder
  - Proposed collimation in BTL to reduce/eliminate waste beam. (Meeting on 08 Oct)
  - Injection at 700 MeV. Saves  $\sim 1/2$  m of space
- Lattice
  - Method to reduce  $1/2$  integer proposed.
    - Studies once Booster starts up
    - Work on effect of removing corrector at L11 (see today's talk)
- Digital LLRF
  - System is  $1/2$  way done – require RF section.
  - Will meet with B. Chase on phase locking scheme between PIP-II and Booster.
- Magnet girder tests
  - Set up at E4R
  - Area needs to be cleaned up.
  - Lead person has been identified for install/cleanup: Fernando Juarez (Mechanical)
- 20 Hz infrastructure
  - First meeting held 19 Sep 2019. Docs on beamdocs. A lot of work!
- 2 stage collimators
  - Work will start in November after task code is issued.

# Task force updates (cont'd)

- Wide gradient extraction magnets
  - Calculation for gap size to be completed by end of October. Required for TD to start their calculations.
- 20 Hz cavity tests
  - RF cavity tests has been done. Report will be available soon. Talk next meeting
- Shielding assessment
  - First meeting held. M. Vincent (Safety) will be leading.
- Tevatron tunnel mods for BTL
  - New lattice means no more rolled dipoles to get above the ceiling.
  - A beam pipe will go straight through the tunnel. Removed when necessary to move magnets.
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